

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0050006; AI 42774; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** Village of Parks
Wastewater Treatment Facility
1010 Martin Street
Parks, LA 70582
- II. PREPARED BY:** Afton J. Bessix
- DATE PREPARED:** October 21, 2009
- III. PERMIT ACTION:** reissue LPDES permit LA0050006, AI 42774; PER20090001
- LPDES application received: May 18, 2009
- EPA has not retained enforcement authority.
- IV. FACILITY INFORMATION:**
- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Village of Parks.
 - B. The permit application does not indicate the receipt of industrial wastewater.
 - C. The facility is located on Perrioux Street in Parks, St. Martin Parish.
 - D. The treatment facility consists of a LEMNA pond with three treatment zones: aeration, floating baffles and duckweed, and nitrification. Disinfection is by chlorination.
 - E. Outfall 001
 - Discharge Location: Latitude 30° 13' 40" North
Longitude 91° 50' 0" West
 - Description: treated sanitary wastewater
 - Design Capacity: 0.09 MGD
 - Type of Flow Measurement which the facility is currently using:
V-notch weir, Combination Totalizing Meter / Continuous Recorder

V. RECEIVING WATERS:

This facility was previously listed as flowing into an unnamed ditch; thence into Cypress Island Coulee; thence into Cypress Island Coulee Canal in subsegment 060801 of the Vermilion-Teche. However, after further review it was discovered that the discharge is into an unnamed ditch; thence into Cypress Island Coulee; thence into Bayou Tortue; thence into Bayou Teche in segment **060401** of the Vermilion - Teche Basin. Therefore, for purposes of reissuing this permit, subsegment 060401 will be used in the development of requirements. This segment is not listed on the 303(d) list of impaired waterbodies.

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The designated uses and degree of support for Segment 060401 of the Vermilion - Teche Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 060401	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 060401 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 060401 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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For additional information, contact:

Ms. Afton J. Bessix
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 060401, Bayou Teche – Keystone Locks and Dam to Charenton Canal, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 060401 was previously listed as impaired for phosphorus, nitrogen (Nitrate+Nitrite as N), organic enrichment/low DO, pathogen indicators, suspended solids/ turbidity/siltation, and carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060401:

Bayou Teche Watershed TMDL for Dissolved Oxygen Including WLAs for Twenty-two Facilities and Addressing Nutrients

The *Bayou Teche Watershed TMDL for Dissolved Oxygen Including WLAs for Twenty-two Facilities and Addressing Nutrients* was final on December 1, 1999 and revised on January 5, 2005. Although this facility was not included in the TMDL, facilities with similar waste streams were assigned wasteload allocations. The Linwood Subdivision is a facility listed in the TMDL with a similar type and size of discharge. According to the Addendum to the 2000 Bayou Teche TMDL, effluent reaeration was not needed for any dischargers to the Teche, and effluent dissolved oxygen limitations are therefore not needed. Proposed permit limits were given for CBOD₅ and Ammonia-Nitrogen for the Linwood Subdivision and the limits are as follows: 10 mg/l CBOD₅ / 10 mg/l NH₃-N. Therefore, the Village of Parks will be required to meet these limitations.

Total Maximum Daily Load (TMDL) for TSS, Turbidity, and Siltation for the Bayou Teche Watershed

As per the TMDL "Point source loads do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors, and dischargers of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocation for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, TSS limits will be permitted according to the current state policy.

Bayou Teche TMDL for Fecal Coliform

As per the Bayou Teche Fecal Coliform TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will be permitted according to the current state policy.

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Total Maximum Daily Load (TMDL) for the Pesticide Carbofuran in the Mermentau River and Vermilion - Teche River Basins

There are no known point source discharges of Carbofuran in the Mermentau Basin, and therefore no allocation was given to point sources. There is one point source in the Vermilion-Teche (FMC Corp. LA0064360) but they do not discharge Carbofuran. Likewise no allocation was given to point source discharges in the Vermilion - Teche River Basin.

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	N/A	10 mg/l	15 mg/l	Limits are set in accordance with the <i>Addendum to the Bayou Teche TMDL for Biochemical Oxygen-Demanding Substances</i> .
TSS	N/A	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	N/A	10 mg/l	20 mg/l	Limits are set in accordance with the <i>Addendum to the Bayou Teche TMDL for Biochemical Oxygen-Demanding Substances</i> .

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

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Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0050006: Issued: January 1, 2005
Expired: December 31, 2009

Interim Effluent Limitations: beginning the effective date of the permit lasting until three years from the effective date of the permit

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	1/week	Measure
CBOD ₅	10 mg/l	15 mg/l	1/month	Grab
TSS	15 mg/l	23 mg/l	1/month	Grab
Ammonia-Nitrogen	Report	Report	1/month	Grab
Dissolved Oxygen	Report	---	1/month	Grab
Fecal Coliform Colonies	200	400	1/month	Grab
pH (Standard Units)	6.0 min	9.0 max	1/month	Grab

Final Effluent Limitations: beginning three years from the effective date of the permit through the expiration date of the permit

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	1/week	Measure
CBOD ₅				
May - December	10 mg/l	15 mg/l	1/month	Grab
January - April	20 mg/l	30 mg/l	1/month	Grab
TSS				
May - December	15 mg/l	23 mg/l	1/month	Grab
January - April	20 mg/l	30 mg/l	1/month	Grab

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Ammonia-Nitrogen				
May – December	5 mg/l	10 mg/l	1/month	Grab
January – April	10 mg/l	20 mg/l	1/month	Grab
Dissolved Oxygen	5 mg/l	---	1/month	Grab
Fecal Coliform Colonies	200	400	1/month	Grab
pH (Standard Units)	6.0 min	9.0 max	1/month	Grab

The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed during the period beginning April 2007 and ending March 2009 for this facility.

Date: December 17, 2007

Inspector: LDEQ

Findings and/or Violations:

1. The discharge permit requires that a Municipal Wastewater Pollution Prevention Plan (MWP3) be completed annually and this is not being done.
2. The DMR review from September 2006 – September 2007 revealed excursions for CBOD and TSS.
3. Discharge is clear with foam present and a light chlorine odor
4. Levees were intact and clean, however there are some weeds in the initial pond.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement actions administered against this facility:

EPA Issuance:

Docket #: WE-C-03-0980

Date Issued: September 26, 2008

Findings of Fact:

1. Respondent failed to submit signed and certified DMRs for the following monitoring periods: January, February, April and May 2002; July, October and November 2003; and October 2004.
2. A file review conducted on or about July 21, 2008, revealed that the Respondent exceeded effluent limitations.
3. A file review revealed that the Respondent submitted incomplete DMRs. Specifically, the Respondent failed to report a value for CBOD₅, Ammonia-Nitrogen and Dissolved Oxygen on its DMRs for January, February and March 2005. The Respondent failed to fill out name and title of executive officer date, and phone number for July, August, October and November 2002; January and November 2004; January, February, April, October and November 2005; August 2006; and January, February and March 2007.
4. Respondent failed to submit noncompliance reports for effluent violations for the following monitoring periods: July and December 2002, February, November and December 2004, May and December 2005, January and February 2006, and March 2007.

Order:

1. To immediately take, upon receipt of the Compliance Order, any and all steps necessary to achieve and maintain compliance with permit limitations and conditions contained in LPDES permits LA0050006.

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2. To submit within 30 days after receipt of this Compliance Order, properly completed DMRs for the monitoring periods mentioned in the Findings of Fact portion.
3. To submit within 30 days after receipt of this Compliance Order, a written report that includes a detailed description of the circumstances surrounding the cited violations and actions taken or to be taken to achieve compliance.

C) DMR Review

A review of the discharge monitoring reports for the period beginning April 2007 through March 2009 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
TSS	001	April 2007	15 mg/L 23 mg/L	33 mg/L 33 mg/L
Ammonia-Nitrogen	001	January 2008	10 mg/L	14.4 mg/L
TSS	001	February 2008	20 mg/L	22 mg/L
Ammonia-Nitrogen	001	February 2008	10 mg/L	12 mg/L
TSS	001	March 2008	20 mg/L 30 mg/L	44 mg/L 44 mg/L
TSS	001	April 2008	20 mg/L	30 mg/L
TSS	001	May 2008	15 m/L	16 mg/L
Ammonia-Nitrogen	001	May 2008	5 mg/L	9.6 mg/L
TSS	001	June 2008	15 mg/L	18 mg/L
Ammonia-Nitrogen	001	June 2008	5 mg/L 10 mg/L	11.2 mg/L 11.2 mg/L
CBOD ₅	001	June 2008	10 mg/L	15 mg/L
TSS	001	August 2008	15 mg/L	21 mg/L
TSS	001	November 2008	15 mg/L	23 mg/L
TSS	001	December 2008	15 mg/L 23 mg/L	27 mg/L 27 mg/L
CBOD ₅	001	December 2008	10 mg/L	11 mg/L
TSS	001	February 2009	20 mg/L 30 mg/L	34 mg/L 34 mg/L
Ammonia-Nitrogen	001	March 2009	10 mg/L	12.8 mg/L

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Also, the dissolved oxygen limit has been removed from the permit based upon the Addendum to the 2000 Bayou Teche TMDL for Biochemical Oxygen-Demanding Substance. Although this facility was not included in the TMDL, a facility with similar type and size of discharge was used as a reference. Concentration limits were given for the St. Landry Sewer District #1/Linwood Subdivision and they are as follows: 10 mg/l CBOD₅ / 10 mg/l NH₃-N. Effluent reaeration was not needed for any of the discharges to the Teche, and effluent dissolved oxygen limitations are therefore not needed.

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In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.02 and 0.10 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	1/week	Measure
CBOD ₅	1/month	Grab
Total Suspended Solids	1/month	Grab
Ammonia-Nitrogen	1/month	Grab
Dissolved Oxygen	1/month	Grab
Fecal Coliform Bacteria	1/month	Grab
pH	1/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0050006, due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

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XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Village of Parks, Wastewater Treatment Facility, May 18, 2009.